

A METHOD AND A MACHINE FOR HEAT-SHRINKING HEAT-SHRINK SLEEVES ENGAGED INDIVIDUALLY ON ARTICLES SUCH AS BOTTLES

This application is entitled to the benefit of and incorporates by reference essential subject matter disclosed in French Patent Application No. 0309426 filed on July 31, 2003.

FIELD OF THE INVENTION

[0001] The present invention relates to the field of heat-shrinking sleeves made from a film of heat-shrink plastics material and engaged individually on articles such as bottles, for example.

BACKGROUND OF THE INVENTION

[0002] Continuously-operating shrinking machines have been in existence for about thirty years, and they are generally implemented in the form of a tunnel oven serving to shrink respective sleeves of heat-shrink plastics material engaged on articles which are placed on a conveyor belt forming the bottom of the shrinking tunnel. As each article travels on the conveyor belt from an upstream end towards a downstream end of the tunnel oven, the sleeve engaged on each article softens and then shrinks onto said article.

[0003] Very many techniques have already been implemented for controlling the anamorphic distortion of patterns printed on the sleeve during shrinking of said sleeve onto the article, and also for controlling the quality of sleeve shrinkage, which sleeve must be free from any curling or other imperfections on leaving the tunnel oven.

[0004] Amongst the numerous patent documents stemming from the Applicant, particular reference can be made to the following: FR-A-2 588 828, FR-A-2 634 274, FR-A-2 758 387, FR-A-2 797 944, and US-A-5 031 298.

[0005] The various machines that have been made in this way are dedicated solely to industrial use in which it is desired to place sleeves on articles traveling at as high a rate of throughput as possible, and then to shrink the sleeves onto the associated articles, with the steps taking place continuously and solely in the presence of knowledgeable professionals.

[0006] A new need is now appearing that is associated with personalizing articles, and in particular bottles, with this being performed at the point of sale, leaving the consumer with the widest possible latitude in selecting a sleeve of desired appearance for shrinking onto an article. Unfortunately, machines of the above-described type are completely unsuitable for on-demand use by an average consumer who knows nothing about shrinkage phenomena.

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